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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/024,412 | 12/17/2001 | Ka Cheong Leung | 6173/5006US | 5304 |
| 43829 | 7590 | 02/07/2006 | EXAMINER | |
| ROBERT M BAUER, ESQ. LACKENBACH SIEGEL, LLP 1 CHASE ROAD SCARSDALE, NY 10583 | | | NGUYEN, DUC M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2685 | |

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/024,412 | Applicant(s) LEUNG ET AL. | |
| | Examiner Duc M. Nguyen | Art Unit 2685 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-21 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the applicant's response filed on 11/28/05. Claims **1-27** are now pending in the present application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hannu et al** (US 2002/0058501).

Regarding claim **1**, **Hannu** discloses a method for providing wireless communication between a mobile station A and a network station B (see Figs. 1-2 and [0030]) using a context for message compression, comprising:

- storing persistently signaling messages specific to a profile for a specific mobile station in a dictionary for storing signaling messages (see [0033] through [0036] and [0044] through [0048]), wherein since dictionaries are updated from one communication session to another communication session, this would read on "storing persistently signaling messages" as claimed. Further, since each mobile station would have different dictionaries dedicated its messages, and since these messages would comprise information at least related to the user of this particular mobile station, it is clear that these messages would obviously comprise information at least specific to a "profile" for

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a specific mobile station or at least specific to the user of the mobile station. Here, any information related to the user of a mobile station (i.e, user name) would read on a user "profile", and any information related to a mobile station (i.e, Mobile Identity Number, also known as MIN) would read on the mobile station "profile".

- providing communication between the mobile station and the network station using the dictionary for storing signaling messages specific to a profile for a specific mobile station for message compression (see [0037]-[0038], [0052]).

Therefore, the claimed limitations regarding a "profile" are made obvious by **Hannu**.

Regarding claim **22**, it is clear that **Hannu** would disclose a compressor and a decompressor as claimed (see Fig. 2 and [0031]).

3. Claims **2-5, 7-11, 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hannu** in view of **Sharpe** (US **6,085,069**)

Regarding claim **2**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, as is well known in the art and as clearly mentioned by **Hannu**, the dictionary would store only parts or strings of messages which would be useful for compression (see [0033]). Since the protocol and identities of the device and network, inherently included in the header of a message, would obviously be one of most "frequently used items" in a message, it is clear that the dictionary would obviously store identities as a useful string for message compression in a similar way as disclosed by **Sharpe** (see col. 6, lines 20-59 regarding most "frequently used items"). Therefore, it

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would have been obvious to one skilled in the art to recognize the benefit of “frequently used items” in data compression, and to incorporate the above teaching of **Sharpe** to **Hannu** to include the most frequently used device information such as device and network identifiers in a dictionary, for improving the compression ratio of the message.

Regarding claim **3, 10**, the claim is rejected for the same reason as set forth in claim 2 above. In addition, it is clear that the most frequently used items in a message would obviously comprise user information such as user name, user e-mail address.

Regarding claim **4**, the claim is rejected for the same reason as set forth in claim 1 above. However, **Hannu** fails to disclose a removable identity module (SIM card). However, using a SIM card as an external storage for storing user information is well known in the art. Therefore, it would have been obvious to one skill in the art to modify **Hannu** to provide a removable identity module (SIM card) as claimed, for extending memory capability of the mobile device with an external storage.

Regarding claim **5**, the claim is rejected for the same reason as set forth in claim 3 above. In addition, it is clear that **Hannu** would disclose a plurality of dictionaries as claimed (see [0032]).

Regarding claim **7**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, it is clear that in order to compress and/or decompress a message, a code or software program should be utilized and would obviously be downloaded to the compressors and decompressors shown in Fig. 2 of **Hannu**, in order to perform the above compression and decompression algorithm.

Regarding claim **8**, it is clear that **Hannu** would disclose a computer-processable medium for the same reason as set forth in claim 7 above.

Regarding claims **9, 11, 13**, the claims are rejected for the same reason as set forth in claims **2, 5, 7** above, respectively.

Regarding claims **23-26**, the claims are interpreted and rejected for the same reason as set forth in claims **2-5** above, respectively.

4. Claims **6, 12, 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hannu** in view of **Bellovin (EP 0933876)**.

Regarding claim **6**, the claim is rejected for the same reason as set forth in claim 1 above. However, **Hannu** fails to disclose protocol-specific information in a static dictionary. However, **Bellovin** discloses a data compression method for packet transmission, wherein a plurality of static dictionaries are used, wherein one of the static dictionary comprise protocol-specific information (see col. 5, lines 1-9). Therefore, it would have been obvious to one skill in the art to further incorporate Bellovin's teaching to Hannu to provide a protocol-specific information in a static dictionary as claimed, for further improving the compression ratio of the communication signal.

Regarding claim **12**, the claim is rejected for the same reason as set forth in claim 6 above.

Regarding claim **27**, the claim is rejected for the same reason as set forth in claim 6 above.

Allowable Subject Matter

5. Claims 14-21 are allowed.

As to claim 14, the cited prior art of record fail to disclose or make it obvious the claimed invention for the reasons as stated in Applicant's response filed on 10/27/05, pages 11-12.

Response to Arguments

6. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- **Thompson** et al (US Pub. Number 2002/0115407), Wireless ASP systems and method.
- US006414610B1 to **Smith**, Data compression, and
- US005951623A to **Reynar** et al.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

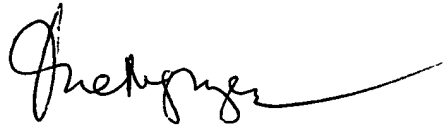
(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Edward Urban (Supervisor) whose telephone number is (571) 272-7899.

Duc M. Nguyen
Feb 2, 2006

A handwritten signature in black ink, appearing to read 'Duc M. Nguyen', with a long, sweeping horizontal line extending to the right.